

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application of Robert L. Popp, et al. Art Unit 3761
Serial No. 10/036,573
Filed December 31, 2001
Confirmation No. 4042
For MECHANICAL FASTENING SYSTEM FOR AN ABSORBENT ARTICLE
Examiner Karin M. Reichle

AMENDED APPEAL BRIEF

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Examiner Karin M. Reichle

February 14, 2007

AMENDED APPEAL BRIEF

This is an appeal from the final rejection of the claims of the above-referenced application made in the final Office action dated August 10, 2006. A Notice of Appeal was filed on August 23, 2006.

This Amended Appeal Brief is being submitted in response to the Notification of Non-Complaint Appeal Brief dated February 2, 2007.

I. REAL PARTY IN INTEREST

The real party in interest in connection with the present appeal is Kimberly-Clark Worldwide, Inc. of 401 N. Lake Street, Neenah, Wisconsin 54957-0349, a corporation of the state of Delaware, owner of a 100 percent interest in the pending application.

II. RELATED APPEALS AND INTERFERENCES

Appeals have been filed in U.S. Patent Application Serial No. 10/038,818 entitled MECHANICAL FASTENING SYSTEM FOR AN ABSORBENT ARTICLE (attorney docket no. KCC 4771); U.S. Patent Application Serial No. 10/038,796 entitled ABSORBENT ARTICLE WITH IMPROVED FASTENING SYSTEM AND METHOD OF FASTENING THEREOF (attorney docket no. KCC 4767); and U.S. Patent Application Serial No. 11/196,169 entitled MECHANICAL FASTENING SYSTEM FOR

AN ABSORBENT ARTICLE (attorney docket no. KCC 4772.7). These applications have common subject matter with the case at hand and Kimberly-Clark Worldwide, Inc. is owner of a 100 percent interest in each of these applications.

III. STATUS OF CLAIMS

Claims 3, 9, 28, 30, 31, 33-37, and 40-43 are currently pending in the application. Claims 1, 6, 7, 10, 12, 13, 15, 18, 19, 22-27, 29, 32, 38, and 39 were previously cancelled, and claims 2, 4, 5, 8, 11, 14, 16, 17, 20, and 21 stand withdrawn from consideration. A copy of the claims involved in this appeal appears in the Claims Appendix of this Brief.

Claims 3, 9, 28, 30, 31, 33-37, and 40-43 stand rejected.

The rejections of claims 3, 9, 28, 30, 31, 33-37, and 40-43 are being appealed.

IV. STATUS OF AMENDMENTS

No amendments have been filed after the mailing of the final Office action dated August 10, 2006.

V. SUMMARY OF CLAIMED SUBJECT MATTER

The following summary correlates claim elements to specific embodiments described in the application specification, but does not in any manner limit claim interpretation. Rather, the following summary is provided only to facilitate the Board's understanding of the subject matter of this appeal.

With reference to the present specification and drawings, claim 28 is directed to a mechanical (e.g., hook and loop) fastening system 80 for an article such as a training pant 20. See page 22, lines 7-8 and Figs. 1-5. The fastening system 80 comprises a first fastening component 82, 83 comprising an oriented nonwoven loop material secured to a substrate. See

page 22, lines 19-22, page 23, lines 23-27, page 27, line 27 through page 28, line 3, and Figs. 1-5. The oriented nonwoven loop material comprises a nonwoven web of fibers in which a greater number of fibers are oriented in a selected direction by the application of a force in the selected direction to extend the web. See page 27, line 8 through page 28, line 20 and Figs. 6 and 7. A second fastening component 84, 85 comprises a hook material. See page 22, lines 19-22 and Figs. 1-5. The oriented nonwoven loop material of the first fastening component 82, 83 is adapted for releasable connection with the hook material of the second fastening component 84, 85. See page 22, lines 8-15 and Figs. 1 and 4.

Claim 33 is directed to an absorbent article, such as training pant 20, for personal wear. See page 11, line 27 through page 12, line 7 and Figs. 1-5. The absorbent article 20 comprises a liquid permeable inner layer 42 for contact with a wearer's skin, an outer layer 40 in superposed relationship with the inner layer, and an absorbent layer 44 disposed between the inner layer and the outer layer. See page 11, lines 17-21 and Figs. 1-5. The article 20 has a first end region 24 and a second end region 22. See page 11, lines 4-8. A mechanical (e.g., hook and loop) fastening system 80 comprises at least one first fastening component 82, 83 disposed generally at the first end region 24 of the article and at least one second fastening component 84, 85 disposed generally at the second end region 22 of the article and adapted for releasable connection with the at least one first fastening component to secure the article on the wearer of the article. See page 22, lines 7-27 and Figs. 1-5. The at least one first fastening component 82, 83 comprises an oriented nonwoven loop material secured to a substrate. See page 22, lines 19-22, page 23, lines 23-27, page 27, line 27 through page 28, line 3, and Figs. 1-5. The oriented nonwoven

loop material comprises a nonwoven web of fibers in which a greater number of fibers are oriented in a selected direction by the application of a force in the selected direction to extend the web. See page 27, line 8 through page 28, line 20 and Figs. 6 and 7. The at least one second fastening component 84, 85 comprises a hook material. See page 22, lines 19-22 and Figs. 1-5. The oriented nonwoven loop material of the at least one first fastening component 82, 83 is adapted for releasable connection with the hook material of the at least one second fastening component 84, 85. See page 22, lines 8-15 and Figs. 1 and 4.

Claim 40 is directed to a mechanical (e.g., hook and loop) fastening system 80 for an article 20. See page 22, lines 7-8 and Figs. 1-5. The fastening system comprises a first fastening component 82, 83 comprising a loop material formed by a nonwoven web of fibers. See page 22, lines 19-22, page 23, lines 21-23, and Figs. 1-5. The fibers in the nonwoven web is oriented by drawing of the nonwoven web of fibers in a direction so that more of the fibers are oriented in the direction of drawing than prior to drawing of the nonwoven web of fibers. See page 27, line 8 through page 28, line 20 and Figs. 6 and 7. A second fastening component comprises a hook material. See page 22, lines 19-22 and Figs. 1-5. The oriented nonwoven loop material of the first fastening component 82, 83 is adapted for releasable connection with the hook material of the second fastening component 84, 85. See page 22, lines 8-15 and Figs. 1 and 4.

Claim 42 is also directed to a mechanical (e.g., hook and loop) fastening system 80 for an article 20. See page 22, lines 7-8 and Figs. 1-5. The fastening system comprises a first fastening component 82, 83 comprising a loop material formed by a nonwoven web of fibers. See page 22, lines 19-22, page 23,

lines 21-23, and Figs. 1-5. The fibers in the nonwoven web are oriented by application of force to the nonwoven web of fibers in a direction so that more of the fibers are oriented in the direction of force than prior to applying a force to the nonwoven web of fibers. See page 27, line 8 through page 28, line 20 and Figs. 6 and 7. A second fastening component 84, 85 comprises a hook material. See page 22, lines 19-22 and Figs. 1-5. The oriented nonwoven loop material of the first fastening component 82, 83 is adapted for releasable connection with the hook material of the second fastening component 84, 85. See page 22, lines 8-15 and Figs. 1 and 4.

VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

A. Appellants appeal the rejections of claims 3, 9, 28, 30, 31, 33-37, and 40-43 under 35 U.S.C. §112, second paragraph as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

B. Appellants appeal the rejection of claims 3, 9, 28, 30, 31, 33-37, and 40-43 under 35 U.S.C. §112, first paragraph as failing to comply with the written description requirement.

C. Appellants appeal the rejection of claims 3, 9, 28, 30, 31, 33-37, and 40-43 under 35 U.S.C. §102(b) as being anticipated by EP 0 289 198 (Noel et al.).

D. Appellants appeal the rejection of claims 3, 9, 28, 30, 31, 33-37, and 40-43 under 35 U.S.C. §103(a) as being obvious in view of EP 0 289 198 (Noel et al.).

E. Appellants appeal the rejection of claims 3, 9, 28, 30, 31, 33-37, and 40-43 under 35 U.S.C. §102(b) as being anticipated by WO 97/25893 (Weirich et al.).

F. Appellants appeal the rejection of claims 3, 9, 28, 30, 31, 33-37, and 40-43 under 35 U.S.C. §103(a) as being obvious in view of WO 97/25893 (Weirich et al.).

G. Appellants appeal the objection to the drawings.

H. Appellants appeal Figure 9c not being approved because it does not show oriented material.

I. Appellants appeal the objections to the description based on informalities.

J. Appellants appeal the objections to the description under 35 U.S.C. §123(a) as introducing new matter into the disclosure.

VII. ARGUMENT

A. Claims 3, 9, 28, 30, 31, 33-37, and 40-43 satisfy the requirements of 35 U.S.C. §112, second paragraph.

Claims 3, 9, 28, 30, and 31

Claim 28 is directed to a mechanical fastening system for an article. The fastening system comprises:

a first fastening component comprising an oriented nonwoven loop material secured to a substrate, the oriented nonwoven loop material comprising a nonwoven web of fibers in which a greater number of fibers are oriented in a selected direction by the application of a force in the selected direction to extend the web; and

a second fastening component comprising a hook material, the oriented nonwoven loop material of the first fastening component being adapted for releasable connection with the hook material of the second fastening component.

Claim 28 stands rejected under 35 U.S.C. §112, second paragraph "as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention." See page 7, paragraph 7 of the final Office action. The second paragraph of 35 U.S.C §112 sets forth two separate requirements: 1) the claims must set forth the subject matter that applicants regard as their invention; and 2) the claims must particularly point out and distinctly define the metes and bounds of the subject matter that will be protected by the patent grant. M.P.E.P. §2171. It has long been recognized that the Examiner when rejecting a claim based on 35 U.S.C. §112, second paragraph should specify which of the two requirements is the basis for the rejection. M.P.E.P. §2171 citing *Ex parte Ionescu*, 222 USPQ 537, 539 (Bd. App. 1984). Nevertheless, the Examiner in the case at hand failed to specify which of the two requirements is the basis for her rejection under 35 U.S.C. §112, second paragraph. Thus, for the sake of completeness, appellants address both of the requirements set forth in 35 U.S.C. §112, second paragraph herein.

Claim 28 sets forth the subject matter that applicants regard as their invention.

With respect to the first prong of 35 U.S.C. §112, second paragraph, absent evidence to the contrary the invention set forth in the claims is presumed that which the appellants regard as their invention. M.P.E.P. §2172 citing *In re Moore* 169 USPQ 236 (CCPA 1971). In this case, the Examiner has set forth no evidence whatsoever that supports the position that claim 28 is contrary to what the appellants regard as their invention. Accordingly, claim 28 does and is presumed to claim the appellants' invention.

Claim 28 sufficiently points out and distinctly defines the metes and bounds of the subject matter that will be protected by the patent grant.

The Examiner has taken the position that the description of the first fastening component is unclear and, in particular, that the recitation of "oriented nonwoven loop material" is unclear. See page 7, paragraph 7 of the final Office action. However, one skilled in the art would clearly understand what is meant by "oriented nonwoven loop material" when read in light of the specification. In fact, the meaning of "oriented nonwoven loop material" is even set forth in the claim itself. Claim 28 states "the oriented nonwoven loop material comprising a nonwoven web of fibers in which a greater number of fibers are oriented in a selected direction by the application of a force in the selected direction to extend the web." Nothing in appellants' specification is inconsistent with the meaning of "oriented nonwoven loop material" set forth in claim 28. In other words, nothing in appellants' specification makes claim 28 take on an unreasonable degree of uncertainty. M.P.E.P. §2173.03 citing *In re Cohn*, 169 USPQ 95 (CCPA 1971).

One of ordinary skill in the art, when reading claim 28 in light of the specification, would understand that 1) the nonwoven web of fibers has a generally random fiber orientation upon initial formation (e.g., in the configuration of the web before being drawn or tensioned), and 2) upon drawing or otherwise applying force to the web to tension the web in the selected direction so that the fibers become more oriented in the direction of draw. In other words, the term "oriented nonwoven loop material" as used throughout the present specification and claim 28 means that a force was applied to the nonwoven loop material (e.g., drawn) in such a manner that at

least more fibers than were previously oriented in the direction of force become oriented in the direction of force because of the force.

Support for the above position regarding the meaning of "oriented nonwoven loop material" is provided throughout the specification including at page 28, lines 21-23 wherein U.S. Patent No. 4,965,122 is incorporated by reference. The incorporated reference discloses a suitable nonwoven web and illustrates the web at Fig. 6 thereof before extension and at Fig. 5 thereof following extension wherein more fibers (but far less than all of the fibers) have become oriented in the direction of draw.

In addition, page 27, line 8 through page 28, line 20, of the present application describes Figures 6 and 7 in detail. Figures 6 and 7 schematically illustrate how the fibers of an orientable nonwoven material can be oriented in the machine direction and the cross machine direction, respectively. More specifically, Figure 6 schematically illustrates a flow diagram for manufacture of one embodiment of the oriented nonwoven loop material that would make a material oriented in the machine direction. As described at page 27, line 8 of the specification, Figure 6 schematically shows how a nonwoven material can be drawn between two nips to orient the material in the machine direction. The illustrated drawing process is described as orienting the nonwoven fibers to be more aligned in the machine direction than in the cross direction. Figure 7 schematically illustrates a flow diagram for manufacture of another embodiment of the oriented nonwoven loop material that would make a material oriented in the cross machine direction. See page 5, lines 21-24 of the specification.

Moreover, a declaration by Debra Durrance, one of the inventors of the present invention, has also been made of

record. A copy of the declaration is attached hereto in the Evidence Appendix of this Brief. In paragraph 4 of the declaration, Ms. Durrance states that one of ordinary skill in the art would have understood at the time of the invention of the present application the term "oriented nonwoven loop material" to mean a web comprising fibers or filaments that is formed other than by weaving or knitting. The fibers in the web have a generally random orientation except that more of the fibers are generally parallel to a direction corresponding to a direction of force previously applied to the web. The orientation of the fibers would not be understood to be exclusively in the force direction or to be precisely parallel to the force direction.

Accordingly, the meaning of "oriented nonwoven loop material" is clear and has been consistently used by the appellants throughout the specification and in claim 28. Most certainly a person of ordinary skill in the art would understand the meaning of "oriented nonwoven loop material" as used in claim 28.

Furthermore, as best understood by appellants, the Examiner has taken the position that the definition of "oriented material" set forth at page 9, lines 16-18 of appellant's original specification is inconsistent with claim 28. The definition states "'Oriented material' refers to a material in which mechanical drawing of the material has resulted in alignment of the fibers constituting the material in a direction generally parallel to the direction of the applied force." The definition describes the material after the steps to achieve orientation have been carried out. It clearly defines that the orientation of the fibers (i.e., alignment) of the material occurs in a direction which a force (i.e., mechanical drawing)

had previously been applied. This is certainly consistent with the "oriented nonwoven loop material" recited in claim 28.

The second prong of 35 U.S.C. §112, second paragraph requires that the claims set out and circumscribe a particular subject matter with a reasonable degree of clarity and particularity. M.P.E.P. §2173.02. The Federal Circuit has held that this standard is met if "those skilled in the art would understand what is claimed when the claim is read in light of the specification." M.P.E.P. §2173.02 citing *Orthokinetics, Inc. v. Safety Travel Chairs, Inc.* 1 USPQ 2d 1081, 1088 (Fed. Cir. 1986). Based on the above, it is clear one skilled in the art would understand the subject matter being claimed in claim 28. Accordingly, claim 28 is submitted to satisfy all of the requirements of 35 U.S.C. §112, second paragraph.

Claims 3, 9, 30, and 31 depend from claim 28 and satisfy all of the requirements of 35 U.S.C. §112, second paragraph for the same reasons as claim 28.

Claims 33-37

Claim 33 is directed to an absorbent article for personal wear. The absorbent article comprises:

a liquid permeable inner layer for contact with a wearer's skin, an outer layer in superposed relationship with the inner layer, and an absorbent layer disposed between the inner layer and the outer layer, the article having a first end region and a second end region; and

a mechanical fastening system comprising at least one first fastening component disposed generally at the first end region of the article and at least one second fastening component disposed generally at the second end region of said article and adapted for releasable connection with the at least one first fastening component to secure the article on the wearer of said

article, the at least one first fastening component comprising an oriented nonwoven loop material secured to a substrate, the oriented nonwoven loop material comprising a nonwoven web of fibers in which a greater number of fibers are oriented in a selected direction by the application of a force in the selected direction to extend the web, the at least one second fastening component comprising a hook material, the oriented nonwoven loop material of the at least one first fastening component being adapted for releasable connection with the hook material of the at least one second fastening component.

Claim 33 is submitted to meet all of the requirements of 35 U.S.C. §112, second paragraph for substantially the same reasons as set forth above with respect to claim 28. That is, claim 33 does and is presumed to claim appellants' invention, and one skilled in the art would understand the subject matter being claimed when claim 33 is read in light of the specification.

Claims 34-37 depend from claim 33 and satisfy all of the requirements of 35 U.S.C. §112, second paragraph for the same reasons as claim 33.

Claims 40 and 41

Claim 40 is directed to a mechanical fastening system for an article. The fastening system comprises:

a first fastening component comprising a loop material formed by a nonwoven web of fibers, the fibers in the nonwoven web being oriented by drawing of the nonwoven web of fibers in a direction so that more of the fibers are oriented in the direction of drawing than prior to drawing of the nonwoven web of fibers; and

a second fastening component comprising a hook material, the oriented nonwoven loop material of the first fastening

component being adapted for releasable connection with the hook material of the second fastening component.

Claim 40 is submitted to meet all of the requirements of 35 U.S.C. §112, second paragraph for substantially the same reasons as set forth above with respect to claim 28. That is, claim 40 does and is presumed to claim appellants' invention, and one skilled in the art would understand the subject matter being claimed when claim 40 is read in light of the specification.

Claim 41 depends from claim 40 and satisfy all of the requirements of 35 U.S.C. §112, second paragraph for the same reasons as claim 40.

Claims 42 and 43

Claim 42 is directed to a mechanical fastening system for an article. The fastening system comprises:

a first fastening component comprising a loop material formed by a nonwoven web of fibers, the fibers in the nonwoven web being oriented by application of force to the nonwoven web of fibers in a direction so that more of the fibers are oriented in the direction of force than prior to applying a force to the nonwoven web of fibers; and

a second fastening component comprising a hook material, the oriented nonwoven loop material of the first fastening component being adapted for releasable connection with the hook material of the second fastening component.

Claim 42 is submitted to meet all of the requirements of 35 U.S.C. §112, second paragraph for substantially the same reasons as set forth above with respect to claim 28. That is, claim 42 does and is presumed to claim appellants' invention, and one

skilled in the art would understand the subject matter being claimed when claim 42 is read in light of the specification.

Claim 43 depends from claim 42 and satisfy all of the requirements of 35 U.S.C. §112, second paragraph for the same reasons as claim 42.

B. Claims 3, 9, 28, 30, 31, 33-37, and 40-43 satisfy the written description requirement of 35 U.S.C. §112, first paragraph.

Claim 3, 9, 28, 30, and 31

Claim 28, which is set forth above, satisfies the written description requirement under 35 U.S.C. §112, first paragraph. The written description requirement is satisfied if the claimed invention is sufficiently detailed such that one skilled in the art can reasonably conclude that the inventor has possession of the claimed invention. M.P.E.P §2163 citing *Moba, B.V. v. Diamond Automation, Inc.*, 66 USPQ2d 1429, 1438 (Fed. Cir. 2003). An applicant shows possession of the claimed invention by describing the claimed invention with all of its limitations using such descriptive means as words, structures, figures, diagrams, and formulas that fully set forth the claimed invention. M.P.E.P. §2163 citing *Lockwood v. American Airlines, Inc.*, 107 F.3d 1565, 1572, 41 USPQ2d 1961, 1966 (Fed. Cir. 1997). In this case, appellants have clearly met this burden as both the drawings and the specification set forth each and every element of claim 28 in sufficient detail that one skilled in the art can reasonably conclude that the inventor had possession of the claimed invention.

In particular, the following is a listing of the pages and line numbers of the specification and figures that provide support for the features recited in claim 28.

CLAIM FEATURE

A mechanical fastening system for an article, said fastening system comprising:

a first fastening component comprising an oriented nonwoven loop material secured to a substrate,

the oriented nonwoven loop material comprising a nonwoven web of fibers in which a greater number of fibers are oriented in a selected direction by the application of a force in the selected direction to extend the web; and

a second fastening component comprising a hook material,

the oriented nonwoven loop material of the first fastening component being adapted for releasable connection with the hook material of the second fastening component.

SUPPORT

See page 22, line 7 through page 27, line 7 and Figs. 1-5.

See page 22, line 19-22, page 23, line 21-27, and Figs. 1-5.

See page 27, line 8 through page 28, line 20 and Figs. 6 and 7.

See page 22, lines 19-22, page 23, lines 3-20, and Fig. 1-5.

See page 22, lines 8-15 and Figs. 1 and 4.

It appears from the rejection that the Examiner fails to recognize the difference between "oriented" material and "orientable" material. Before the material is oriented by the application of force it is an "orientable" material. After the application of force, it is an "oriented" material. It is the oriented material that is being claimed. The time of orientation is irrelevant except to the extent that the claims require them to be so oriented to fall within the scope of the claim. Thus, the nonwoven loop material can be oriented at anytime so long as it is oriented before the nonwoven loop material is secured to the substrate.

The manner of orientation (e.g., by drawing, extending or tensioning) is set forth in detail in the specification. A force is applied to the loop material to produce the orientation of the fibers. There can be no unclarity in that regard.

Claim 28 is therefore submitted to satisfy the written description requirement of 35 U.S.C. §112, first paragraph.

Claims 3, 9, 30, and 31 depend from claim 28 and satisfy the written description requirement of 35 U.S.C. §112, first paragraph for the same reasons as claim 28.

Claims 33-37

Claim 33 is submitted to meet the written description requirement of 35 U.S.C. §112, first paragraph for substantially the same reasons as set forth above with respect to claim 28. That is, appellants' specification and drawings set forth each and every element of claim 33 in sufficient detail that one skilled in the art would reasonably conclude that the inventors had possession of the claimed invention.

Claims 34-37 depend from claim 33 and satisfy the written description requirement of 35 U.S.C. §112, first paragraph for the same reasons as claim 33.

Claims 40 and 41

Claim 40 is submitted to meet the written description requirement of 35 U.S.C. §112, first paragraph for substantially the same reasons as set forth above with respect to claim 28. That is, appellants' specification and drawings set forth each and every element of claim 40 in sufficient detail that one skilled in the art would reasonably conclude that the inventors had possession of the claimed invention.

Claim 41 depends from claim 40 and satisfy the written description requirement of 35 U.S.C. §112, first paragraph for the same reasons as claim 40.

Claims 42 and 43

Claim 42 is submitted to meet the written description requirement of 35 U.S.C. §112, first paragraph for substantially the same reasons as set forth above with respect to claim 28. That is, appellants' specification and drawings set forth each and every element of claim 42 in sufficient detail that one skilled in the art would reasonably conclude that the inventors had possession of the claimed invention.

Claim 43 depend from claim 42 and satisfy the written description requirement of 35 U.S.C. §112, first paragraph for the same reasons as claim 42.

C. Claims 3, 9, 28, 30, 31, 33-37, and 40-43 are unanticipated by and patentable over EP 0 289 198 (Noel et al.).

Claims 3, 9, 28, 30, and 31

As mentioned above, claim 28 is directed to a mechanical fastening system for an article in which one of the fastening components of the fastening system comprises an oriented nonwoven loop material. The oriented nonwoven loop material comprises a nonwoven web of fibers in which a greater number of fibers are oriented in a selected direction by the application of a force in the selected direction to extend the web.

Claim 28 stands rejected as being anticipated by EP 0 289 198 (Noel et al.) because the Office failed to give patentable weight to the claim recitation requiring that the oriented nonwoven loop material comprises a nonwoven web of fibers in

which a greater number of fibers are oriented in a selected direction by the application of a force in the selected direction to extend the web. The reason for ignoring the requirement is the Examiner's conclusion that claim 28 is a product by process claim, or more particularly, that the above noted requirement is a process limitation. See page 9, paragraph 11 of the final Office action. This position is legally incorrect.

Where the claim term is expected to impart a distinctive structural characteristic, it should be considered a structural limitation even if couched in language that would implicate a particular manufacturing process. *In re Granero*, 162 U.S.P.Q. 221, 223 (CCPA 1979). In *Granero*, the claim was directed to "a composite" having among other things, "expanded perlite particles which are **interbonded one to another by the interfusion between the surfaces of the perlite particles while in a pyroplastic state to form a porous perlite panel.**" *Id.* at 222 (emphasis added). In rejecting the claim, the Patent Office took the position that the bolded language was a process limitation, and that this language was the only thing that distinguished the claim from the prior art.

The court rejected this position stating:

"The trouble with the [Patent Office's] approach is that it necessarily assumes that claim 1 should be construed as a product claim containing a process, rather than structural limitation. However, it seems to us that the recitation of the particles as 'interbonded one to another by the interfusion between the surfaces of the perlite particles' is as capable of being construed as a structural limitation as 'intermixed,' 'ground in place,' 'press fitted,' 'etched,' and 'welded,' all of which at one time or another have been separately held

capable of construction as structural rather than process, limitations." *In re Granero*, at 223.

The Court went on to say that the correct approach was to determine whether the prior art showed expanded perlite particles . . . interbonded one to another by interfusion between the surfaces of the perlite particles. *Id.* In other words, the claim was not to be treated as a product by process claim, but rather a product claim including the quoted structural limitation.

The approach mandated by *In re Granero* is applicable in the present instance. The term "a greater number of fibers are oriented in a selected direction by the application of a force in the selected direction to extend the web" imparts a structural characteristic and should be treated as a structural, not a process, limitation. These terms are at least as clearly structural as the terms "interbonded . . . by interfusion", "intermixed," "ground in place," "press fitted," "etched," and "welded", terms that have previously been found to impart a structural characteristic.

If claim 28 is read for what it fairly conveys to one of ordinary skill in the art, including that recitation that a greater number of fibers are oriented in a selected direction by the application of a force in the selected direction to extend the web, claim 28 clearly distinguishes the art of record including Noel et al.

Noel et al. disclose a loop fastening material comprising a backing (22) of orientable material (defined by Noel et al. as a web that has a dimensionally unstable state; see column 4, lines 6-14), preferably a heat shrinking material, and a multiplicity of fibrous elements (28) extending outward from the backing (22). The fibrous elements (28) are intermittently secured to the backing (22) at spaced, fixed regions (32) along the length

of each filament while the orientable backing is in an unstable state. Upon movement back to the stable state of the backing, the fibrous material is shirred (i.e., gathered) to form loops that can be connected to a hook material (52). In one embodiment, the backing is a heat shrinkable material and in another embodiment the backing is an elastomeric material.

Noel et al. lack any disclosure that the fibrous elements (28) are oriented in a selected direction by the application of a force in the selected direction to extend the web. The filaments (30) of the fibrous elements (28) are explicitly stated to be "untensioned" as applied to the substrate (22). (Noel et al., col. 6, ll. 28-32). Rather than the filaments (30), it is the backing (22) that is an unstable (e.g., shrinkable or stretched) condition when the fibrous elements are secured to the backing. *Id.* As a result, shirring of the fibrous elements (28) occurs when the backing moves to its stable condition. (Compare Fig. 3 to Fig. 2 of Noel et al.). Moreover, no extension of any web of fibers in Noel et al. produces any particular orientation of the fibers.

In contrast, the nonwoven web of fibers of the loop material of appellants' first fastening component as recited in claim 28 has a greater number of fibers oriented in a selected direction by the application of a force in the selected direction to extend the web.

The final Office action confuses the backing (22) of Noel et al. with the fibrous material (28). The action cites a number of sections of Noel et al. and concludes that these disclose "the mechanical fastening system is 50 and has a first fastening component 20 of oriented nonwoven loop material 30 attached to a substrate, e.g., 22". See page 9, paragraph 11 of the final Office action. Noel et al. explains that it is the backing (22) (i.e., NOT the fibrous material (28)) that is an

"orientable material". However, Noel et al. uses the term "orientable material" to mean a material "having a dimensionally unstable state that is later transformed to its dimensionally stable state" (col. 3, ll. 38-41).

There is no disclosure or suggestion in Noel et al. that the fibers in the backing become oriented upon extension, as is disclosed in by the present application. The fibrous elements (28) constitute the loop material of Noel et al. The fibrous elements (28) and the filaments (30) making up the fibrous elements are nowhere described in Noel et al. as being "oriented nonwoven loop material" as asserted by the Examiner.

Noel et al. disclose at column 6, lines 28-36 that the filaments (30) are preferably positioned on the backing (22) while the orientable material of the backing is in its heat unstable state "and while the filaments 30 are in an untensioned condition...." Similar disclosure can be found at column 9, lines 10-17. The filaments (30) are untensioned when applied to the backing (22), and further they are compressed (shirred) when the backing moves to a stable condition.

It is not understood how in the face of an explicit disclosure in Noel et al. that the filaments are not tensioned that the Examiner can find that tensioning is disclosed. Loops are formed by Noel et al. through compression of the filaments so that they buckle upward to form loops. In sharp contrast, appellants use the fibers forming the web material as the loops. The loops exist before any manipulation of the web. Extension of the web of fibers produces a particular orientation of the fibers that improves interengagement of the hooks with the fiber loops.

For these reasons, claim 28 is submitted to be unanticipated by and patentable over Noel et al.

Claims 3, 9, 30, and 31, depending directly or indirectly from claim 28, are submitted as novel and patentable over Noel et al. for the same reasons as claim 28.

Claims 33-37

Claim 33 includes the same requirement argued above for claim 28. Accordingly, claim 33 is submitted to be unanticipated by and patentable over Noel et al. for the same reasons as claim 28. That is, Noel et al. fail to teach an oriented nonwoven loop material comprising a nonwoven web of fibers in which a greater number of fibers are oriented in a selected direction by the application of a force in the selected direction to extend the web. Claims 34-37 depend directly or indirectly from claim 33 and are submitted to be unanticipated by and patentable over Noel et al. for the same reasons as claim 33.

Claims 40 and 41

As stated previously, claim 40 is directed to a mechanical fastening system for an article comprising, in part, a first fastening component. The first fastening component comprises a loop material formed by a nonwoven web of fibers, the fibers in the nonwoven web being oriented by drawing of the nonwoven web of fibers in a direction so that more of the fibers are oriented in the direction of drawing than prior to drawing of the nonwoven web of fibers.

Claim 40 is unanticipated by and patentable over Noel et al. in that Noel et al. fail to teach a mechanical fastening system including a loop material formed by a nonwoven web of fibers, the fibers in the nonwoven web being oriented by drawing of the nonwoven web of fibers in a direction so that more of the

fibers are oriented in the direction of drawing than prior to drawing of the nonwoven web of fibers.

The requirement for the loop material to be oriented by drawing must be given weight as a structural limitation of claim 40 for the same reasons as given for giving the requirement for "a greater number of fibers are oriented in a selected direction by the application of a force in the selected direction to extend the web" in claim 28 as argued above. Noel et al. fail to teach a loop material being oriented by drawing as required by claim 40. As a result, claim 40 is unanticipated by and patentable over Noel et al. Claim 41 depends from claim 40 and is patentable for the same reasons as claim 40.

Claims 42 and 43

Claim 42 is unanticipated by and patentable over Noel et al. for substantially the same reasons as set forth above with respect to claim 40. That is, Noel et al. fail to show a mechanical fastening system including a loop material formed by a nonwoven web of fibers, the fibers in the nonwoven web being oriented by application of force to the nonwoven web of fibers in a direction so that more of the fibers are oriented in the direction of force than prior applying a force to the nonwoven web of fibers. Claim 43 depends from claim 42 and is patentable for the same reasons as claim 42.

D. Claims 3, 9, 28, 30, 31, 33-37, and 40-43 are nonobvious in view of EP 0 289 198 (Noel et al.).

Claims 3, 9, 28, 30, and 31

Claims 3, 9, 28, 30, and 31 stand further rejected as being obvious in view of Noel et al. However, appellants submit that the Examiner has failed to establish a *prima facie* case of

obviousness with respect to these claims. Even under 35 U.S.C. §103 the prior art reference or combination or references must teach or suggest all of the claimed elements. M.P.E.P. §2142 and §2143. In this case, Noel et al. fail to teach or suggest an "oriented nonwoven loop material comprises a nonwoven web of fibers in which a greater number of fibers are oriented in a selected direction by the application of a force in the selected direction to extend the web" as recited in claim 28.

As mentioned above, Noel et al. lack any teaching or suggestion that the fibrous elements (28) are oriented in a selected direction by the application of a force in the selected direction to extend the web. The filaments (30) of the fibrous elements (28) are explicitly stated to be "untensioned" as applied to the substrate (22). (Noel et al., col. 6, ll. 28-32). Rather than the filaments (30), it is the backing (22) that is in an unstable (e.g., shrinkable or stretched) condition when the fibrous elements are secured to the backing. *Id.* As a result, shirring of the fibrous elements (28) occurs when the backing moves to its stable condition. (Compare Fig. 3 to Fig. 2 of Noel et al.). The fibrous elements (28) and the filaments (30) making up the fibrous elements are nowhere described in Noel et al. as being "oriented nonwoven loop material" as asserted by the Examiner. No extension of any web of fibers in Noel et al. produces any particular orientation of the fibers.

In sharp contrast, appellants use the fibers forming the web material as the loops. The loops exist before any manipulation of the web. Extension of the web of fibers produces a particular orientation of the fibers that improves interengagement of the hooks with the fiber loops. The nonwoven web of fibers of the loop material of appellants' first fastening component as recited in claim 28 has a greater number of fibers oriented in a selected direction by the application of

a force in the selected direction to extend the web. For these reasons, claim 28 is nonobvious in view of and patentable over Noel et al.

There must also be some motivation or suggestion to modify the prior art reference. M.P.E.P. §2142 and §2143. In this case, the Examiner has provided no suggestion or motivation why one of ordinary skill in the art would be motivated to modify Noel et al. Instead, the Examiner has merely stated that "[t]he end product, as best understood, is the same as or obvious from the product of '198, see cited portions *supra*." See page 10, paragraph 12 of the final Office action. This statement provides no suggestion or motivation nor is any suggestion or motivation found elsewhere in the Office's rejection. Thus, the Office clearly fails to establish the suggestion/motivation prong of the obviousness test.

When the Office fails to establish a *prima facie* case of obviousness, the appellants are under no obligation to submit evidence of nonobviousness. M.P.E.P. §2142. Accordingly, claim 28 is submitted to be further nonobvious in view of and patentable over Noel et al.

Claims 3, 9, 30, and 31, depending directly or indirectly from claim 28, are submitted to be nonobvious in view of and patentable over Noel et al. for the same reasons as claim 28.

Claims 33-37

Claim 33 includes the same requirement argued above for claim 28. Accordingly, claim 33 is submitted as nonobvious and patentable over Noel et al. for the same reasons as claim 28. Claims 34-37 depend directly or indirectly from claim 33 and are submitted as nonobvious in view of and patentable over Noel et al. for the same reasons as claim 33.

Claims 40 and 41

With respect to claims 40 and 41, the Examiner has failed to establish a *prima facie* case of obviousness for the same reasons as set forth above with respect to claim 28.

Moreover, claim 40 is nonobvious in view of and patentable over Noel et al. in that Noel et al. fail to show or suggest a mechanical fastening system including a loop material formed by a nonwoven web of fibers, the fibers in the nonwoven web being oriented by drawing of the nonwoven web of fibers in a direction so that more of the fibers are oriented in the direction of drawing than prior to drawing of the nonwoven web of fibers. As stated above, the requirement for the loop material to be oriented by drawing must be given patentable weight as a structural limitation of claim 40. Noel et al. clearly fail to show or suggest loop material being oriented by drawing as required by claim 40. Accordingly, claim 40 is nonobvious in view of and patentable over Noel et al. Claim 41 depends from claim 40 and is patentable for the same reasons as claim 40.

Claims 42 and 43

Claim 42 is patentable over Noel et al. for substantially the same reasons as set forth above with respect to claim 40. That is 1) the Examiner has failed to establish a *prima facie* case of obviousness with respect to these claims, and 2) Noel et al. fail to show or suggest a mechanical fastening system including a loop material formed by a nonwoven web of fibers, the fibers in the nonwoven web being oriented by application of force to the nonwoven web of fibers in a direction so that more of the fibers are oriented in the direction of force than prior applying a force to the nonwoven web of fibers. Claim 43

depends from claim 42 and is patentable for the same reasons as claim 42.

E. Claims 3, 9, 28, 30, 31, 33-37, and 40-43 are unanticipated by and patentable over WO 97/25893 (Weirich et al.).

Claims 3, 9, 28, 30, and 31

Claim 28 is unanticipated by WO 97/25893 (Weirich et al.) because Weirich et al. (like Noel et al. discussed above) fail to show an oriented nonwoven loop material comprises a nonwoven web of fibers in which a greater number of fibers are oriented in a selected direction by the application of a force in the selected direction to extend the web.

Weirich et al. disclose a female component of a refastenable fastening device. The female component comprises an elastomeric adhesive backing (34) and a multiplicity of fibrous elements (30) extending from the backing. Weirich et al. disclose that the multiplicity of fibrous elements (30) may be a nonwoven web. According to Weirich et al., the female component is formed by securing the nonwoven web (30) to the elastomeric backing (34) while the backing is elongated so that when the backing is allowed to return to a relaxed state the nonwoven web is shirred (i.e., gathered). Nowhere do Weirich et al. disclose or even suggest that the nonwoven web (30) is extensible. Weirich et al. also do not teach that the nonwoven web the fibers in the web are oriented by extending the web. Rather, as disclosed at page 8, lines 17-19 of Weirich et al., the filaments (36) of the nonwoven web (30) are in an un tensioned state when they are joined to the elongated backing (34).

Thus, Weirich et al. lack the same teachings that Noel et al. lack. In fact, the passages of Weirich et al. relied upon by the Office in support of its position (e.g., page 15, lines 13 et seq.) are substantially the same as that of Noel et al. That is, Weirich et al. teach that the filaments (36) could conceivably be in a tensioned condition. However, as discussed above, the term tensioned does not explicitly mean that the filaments are actually extended. Moreover, it is not inherent that the filaments are extended simply because they could conceivably be tensioned. For example, they may only be pulled taut and may even be inextensible. Finally, whether these filaments are tensioned or not, there is no teaching or suggestion that the tension produces an orientation in the direction of tension.

Thus, as was the case with Noel et al., Weirich et al. fail to show or suggest a nonwoven loop material comprising a nonwoven web of fibers in which a greater number of fibers are oriented in a selected direction by the application of a force in the selected direction to extend the web as recited in claim 28. As a result, Weirich et al. does not anticipate claim 28.

Claims 3, 9, 30, and 31, depending directly or indirectly from claim 28, are submitted as novel and patentable over Weirich et al. for the same reasons as claim 28.

Claims 33-47

Claim 33 includes the same requirement argued above for claim 28. Accordingly, claim 33 is submitted as novel and patentable over Weirich et al. for the same reasons as claim 28. Claims 34-47 depend directly or indirectly from claim 33 and are submitted as unanticipated by and patentable over Weirich et al. for the same reasons as claim 33.

Claims 40 and 41

Claim 40 is submitted as patentable over Weirich et al. in that Weirich et al. fail to show a mechanical fastening system including a loop material formed by a nonwoven web of fibers, the fibers in the nonwoven web being oriented by drawing of the nonwoven web of fibers in a direction so that more of the fibers are oriented in the direction of drawing than prior to drawing of the nonwoven web of fibers.

The requirement for the loop material to be oriented by drawing must be given weight as a structural limitation of claim 40 for the same reasons as given for giving the requirement for "a greater number of fibers are oriented in a selected direction by the application of a force in the selected direction to extend the web" in claim 28 as argued above. Weirich et al. fail to show loop material being oriented by drawing as required by claim 40 and thus, cannot anticipate claim 40. Claim 41 depends from claim 40 and is patentable for the same reasons as claim 40.

Claims 42 and 43

Claim 42 is unanticipated by and patentable over Weirich et al. for substantially the same reasons as set forth above with respect to claim 40. That is, Weirich et al. fail show a mechanical fastening system including a loop material formed by a nonwoven web of fibers, the fibers in the nonwoven web being oriented by application of force to the nonwoven web of fibers in a direction so that more of the fibers are oriented in the direction of force than prior applying a force to the nonwoven web of fibers. Claim 43 depends from claim 42 and is patentable for the same reasons as claim 42.

F. Claims 3, 9, 28, 30, 31, 33-37, and 40-43 are nonobvious in view of WO 97/25893 (Weirich et al.).

Claims 3, 9, 28, 30, and 31

Claim 28 stands further rejected as being obvious in view of WO 97/25893 (Weirich et al.). However, appellants submit that the Examiner has failed to establish a *prima facie* case of obviousness with respect to these claims. As mentioned above, even 35 U.S.C. §103, the prior art reference or combination of references must teach or suggest all of the claimed elements. M.P.E.P. §2142 and §2143. In this case, Weirich et al. fail to show or suggest a nonwoven loop material comprising a nonwoven web of fibers in which a greater number of fibers are oriented in a selected direction by the application of a force in the selected direction to extend the web as recited in claim 28. Consequently, Weirich et al. cannot render obvious claim 28.

Moreover, the Examiner has provided no suggestion or motivation why one of ordinary skill in the art would be motivated to modify Weirich et al. Instead, the Examiner has merely stated that "[t]he end product, as best understood, is the same as or obvious from the product of '893, see cited portions *supra*." See page 11, paragraph 13 of the final Office action. This statement provides no suggestion or motivation nor is any suggestion or motivation found elsewhere in the Examiner's rejection. Thus, the Examiner has clearly failed to establish the suggestion/motivation prong of the obviousness test.

When the Office fails to establish a *prima facie* case of obviousness, the appellants are under no obligation to submit evidence of nonobviousness. M.P.E.P. §2142. Accordingly, claim 28 is submitted to be nonobvious in view of and patentable over Weirich et al.

For these reasons, claim 28 is submitted to be patentable over Weirich et al. Claims 3, 9, 30, and 31, which depend directly or indirectly from claim 28, are submitted to be patentable over Weirich et al. for the same reasons as claim 28.

Claims 33-37

Claim 33 includes the same requirement argued above for claim 28. Accordingly, claim 33 is submitted as nonobvious in view of and patentable over Weirich et al. for the same reasons as claim 28. Claims 34-37 depend directly or indirectly from claim 33 and are submitted as patentable over Weirich et al. for the same reasons as claim 33.

Claims 40 and 41

Claim 40 is submitted as patentable over Weirich et al., in that the reference fails to show or suggest a mechanical fastening system including a loop material formed by a nonwoven web of fibers, the fibers in the nonwoven web being oriented by drawing of the nonwoven web of fibers in a direction so that more of the fibers are oriented in the direction of drawing than prior to drawing of the nonwoven web of fibers.

The requirement for the loop material to be oriented by drawing must be given weight as a structural limitation of claim 40. Weirich et al. fail to show or suggest loop material being oriented by drawing as required by claim 40 and therefore, does not render claim 40 obvious. Claim 41 depends from claim 40 and is patentable for the same reasons as claim 40.

Claims 42 and 43

Claim 42 is patentable over Weirich et al. for substantially the same reasons as set forth above with respect to claim 40. That is, Weirich et al. fail show or suggest a

mechanical fastening system including a loop material formed by a nonwoven web of fibers, the fibers in the nonwoven web being oriented by application of force to the nonwoven web of fibers in a direction so that more of the fibers are oriented in the direction of force than prior applying a force to the nonwoven web of fibers. Claim 43 depends from claim 42 and is patentable over Weirich et al. for the same reasons as claim 42.

G. Figure 9c has been provided.

On page 3, paragraph 4 of the final Office action, the Examiner objects to the drawings "because a Figure 9c should be provided." In fact, a Figure 9c has been provided. Figure 9c was provided in appellants' Amendment F After Final filed November 14, 2005. Accordingly, appellants request that the Examiner's objections to the drawings be withdrawn.

H. Figure 9c does show an oriented nonwoven loop material secured to a substrate as recited in the claims.

Figure 9c has not been entered by the Examiner because the Examiner is of the opinion that Figure 9c does not show the "oriented" web material as described or claimed. Figure 9c does, however, show the oriented web material.

Figure 9c was filed to show the general orientation of the constituent fibers of the nonwoven web after a force has been applied to the web material. Extending the web (which is illustrated in Figure 9b) causes more of the constituent fibers of the web to become oriented in the general direction of force than were oriented in that direction before the material was extended.

Support for adding Fig. 9c can be found at least at page 9, lines 16-18; page 23, lines 23-27; page 27, line 8 to page 28,

line 20; and the claims of the application as originally filed. As described in the specification, Figure 6 schematically illustrates a flow diagram for manufacture of one embodiment of the oriented nonwoven loop material that has fibers oriented in the machine direction, and Figure 7 schematically illustrates a flow diagram for manufacture of another embodiment of the oriented nonwoven loop material that has fibers oriented in the cross machine direction. The fibers of the resultant oriented nonwoven loop material are oriented in a selected direction by the application of a force. Figure 9c shows the fibers of the web after they have been oriented by the application of a force.

Moreover, original claims 1 and 6 recited, in part, an "oriented nonwoven loop material comprising a nonwoven web and produced by application of a force causing constituent fibers of the nonwoven web to become oriented in a direction of the applied force". Original claims 12 and 15 recited, in part, an "oriented nonwoven loop material produced by application of a force causing constituent fibers of the nonwoven web to become oriented in a direction of the applied force". Original claim 22, 24, and 26 were directed to a method of making a mechanical fastening system for an article comprising forming an oriented nonwoven loop material from a nonwoven web of substantially continuous fibers by drawing the nonwoven web using an applied force to align constituent fibers of the nonwoven web.

In summary, Figure 9c shows the orientation of the fibers of the web after they have been oriented as described in the specification. Accordingly, Figure 9c is clearly supported by the specification as originally filed.

Figure 9c also shows the "oriented" web material as currently claimed. The independent claims currently pending in this case are claims 28, 33, 40, and 42. Claims 28 and 33

recite, in pertinent part, an oriented nonwoven loop material secured to a substrate, the oriented nonwoven loop material comprising a nonwoven web of fibers in which a greater number of fibers are oriented in a selected direction by the application of a force in the selected direction. An oriented nonwoven loop material secured to a substrate as recited in claims 28 and 33 is clearly shown in Figure 9c. The oriented nonwoven loop material is identified by reference number 90' and the substrate is identified by reference number 92. Thus, Figure 9c does show the oriented nonwoven loop material secured to a substrate as claimed in claims 28 and 33.

Claim 40 recites, in pertinent part, a loop material formed by a nonwoven web of fibers, the fibers in the nonwoven web being oriented by drawing of the nonwoven web of fibers in a direction so that more of the fibers are oriented in the direction of drawing than prior to drawing of the nonwoven web of fibers. Claim 42 is similar to claim 40 but recites that the fibers in the nonwoven web being oriented by application of force to the nonwoven web of fibers in a direction so that more of the fibers are oriented in the direction of force than prior to applying a force to the nonwoven web of fibers. Figure 9c clearly shows that more of the fibers of web are oriented in the direction of force after the force was applied to the web than before the force.

Accordingly, Figure 9c does show the "oriented" web material as currently claimed.

For these reasons, appellants request approval and entry of Figure 9c.

I. Appellants appeal the objections to the description based on informalities.

With respect to the Office's position that the term "oriented nonwoven loop material" is unclear and inconsistent, the specification clearly indicates to one of ordinary skill in the art that:

- 1) the nonwoven web of fibers has a generally random fiber orientation upon initial formation (e.g., in the configuration of the web prior to being drawn or tensioned), and
- 2) drawing or otherwise applying force to the web to tension the web in the selected direction so that the fibers will become more oriented in the direction of draw.

Thus, the term "oriented nonwoven loop material" as used in the present application means that a force was applied to the nonwoven loop material (e.g., drawn) in such a manner that at least more fibers than were previously oriented in the direction of force become oriented in the direction of force because of the force.

Support for the above position regarding the meaning of "oriented material" is provided throughout the specification including at page 28, lines 21-23 wherein U.S. Patent No. 4,965,122 is incorporated by reference. The incorporated reference discloses a suitable nonwoven web and illustrates the web at Fig. 6 thereof before extension and at Fig. 5 thereof following extension wherein more fibers (but far less than all of the fibers) have become oriented in the direction of draw.

Page 27, line 11 through page 28, line 20, of the present application describes Figures 6 and 7 in detail. As mentioned above, Figures 6 and 7 illustrate the process of orienting the nonwoven loop material in a selected direction by the application of force.

A declaration by Debra Durrance, one of the inventors of the present invention, has also been made of record. A copy of the declaration is attached. In paragraph 4 of the declaration, Ms. Durrance states that one of ordinary skill in the art would have understood at the time of the invention of the present application the term "oriented nonwoven loop material" to mean a web comprising fibers or filaments that is formed other than by weaving or knitting. The fibers in the web have a generally random orientation except that more of the fibers are generally parallel to a direction corresponding to a direction of force previously applied to the web. The orientation of the fibers would not be understood to be exclusively in the force direction or to be precisely parallel to the force direction. Figures 9a and 9b illustrate an oriented nonwoven loop material before and after a force are applied to the web to orient the web fibers. Figure 9a shows the general orientation of the fibers of the web before a force is applied thereto. Figure 9b, on the other hand, shows the general orientation of the fibers of the web after the force has been applied. As illustrated, more of the web fibers are oriented in a direction generally parallel to the direction of the applied force than before the force was applied to the web.

The claims of the originally filed specification provide further support for the meaning of "oriented nonwoven loop material". For example, original claims 1 and 6 recited, in part, an "oriented nonwoven loop material comprising a nonwoven web and produced by application of a force causing constituent fibers of the nonwoven web to become oriented in a direction of the applied force". Original claims 12 and 15 recited, in part, an "oriented nonwoven loop material produced by application of a force causing constituent fibers of the nonwoven web to become oriented in a direction of the applied force". Original claim

22, 24, and 26 were directed to a method of making a mechanical fastening system for an article comprising forming an oriented nonwoven loop material from a nonwoven web of substantially continuous fibers by drawing the nonwoven web using an applied force to align constituent fibers of the nonwoven web.

Accordingly, the meaning of "oriented nonwoven loop material" is clear and has been consistently used by the appellants throughout the specification. Most certainly a person of ordinary skill in the art would understand the meaning of "oriented nonwoven loop material" as used throughout this application.

Appellants also added the following definition of "Oriented nonwoven loop material" to page 9 of the specification in Amendment F.

"Oriented nonwoven loop material" refers to a web comprising fibers or filaments that is formed other than by weaving or knitting. The fibers in the web have a generally random orientation except that more of the fibers are generally parallel to a direction corresponding to a direction of force previously applied to the web. More fibers in the web are oriented in the direction of force after application of force than before application of force. Thus, the force alters the orientation of at least some of the fibers in the web causing the altered fibers to align generally in the direction of force.

The added definition is clearly supported by and is consistent with the rest of the specification. The definition states that the "fibers in the web have a generally random orientation except that more of the fibers are generally parallel to a direction corresponding to a direction of force

previously applied to the web." This is a true and accurate statement. See, for example, Figures 9a as compared to Figures 8 and 9b. Figures 8 and 9b show more of the fibers generally parallel to a direction corresponding to a direction of force previously applied to the web.

Appellants note that there is a difference between "oriented" (as recited in the present claims) material and "orientable" (as used by the Examiner) material. Before the material is oriented by the application of force it is an "orientable" material. After the application of force, it is an "oriented" material. It is the oriented material that is being claimed. The Examiner has provided no statement capable of being understood as to why a description of how the material becomes oriented (e.g., as occurs in the amendment to page 27, line 8 of the application) is inconsistent with a statement that describes the material after the orientation has occurred.

The various questions posed by the Examiner on page 5 and 6 of the Final Office action can all be answered by simply looking at the definition, reading the application or considering the Declaration of Debra Durrance. The Examiner has pointed to no place where there is any confusion between oriented and orientable material. The term oriented nonwoven loop material encompasses a web of material with fibers that are oriented generally parallel to a direction corresponding to a direction of force previously applied to the web. Whether the fibers could be further oriented by subsequent applications of force is simply irrelevant. Notwithstanding this *non sequitor*, appellants note that nothing in the application remotely suggests any subsequent reorientation of fibers. How many times the material is reoriented is irrelevant. Whether the number of fibers changes or not has no bearing on the definition which states that force has been applied and fibers are aligned in the

direction of that force. Whether fibers are later attached to an inelastic substrate has no bearing on how the fibers became oriented.

Appellants respectfully request that the Examiner's objections to the specification because of informalities be withdrawn.

J. No new matter has been introduced into the disclosure.

The Examiner has also objected to appellants adding the description of Figure 9c, which was discussed above, and the definition of "Oriented nonwoven loop material", which is provided above, to the specification in Amendment F. See paragraph 6, page 6 of the final Office action.

Appellants contend that the description of Figure 9c and the definition of the term "Oriented nonwoven loop material" is not new matter and is supported by the originally filed specification. As indicated in great detail in the prior sections, ample support can be found in the specification for both Figure 9c and the definition of "oriented nonwoven loop material" as presented in Amendment F.

Accordingly, appellants request that the Examiner's objection to the specification under 35 U.S.C. §132(a) be withdrawn.

VIII. CONCLUSION

For the reasons stated above, appellant respectfully request that the Office's rejections be reversed and that claims 3, 9, 28, 30, 31, 33-37, and 40-43 be allowed.

Respectfully submitted,



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IX. CLAIMS APPENDIX

3. The mechanical fastening system of claim 28 wherein the nonwoven web has a machine direction and a cross-machine direction, the direction of extension of the nonwoven web being the machine direction of said nonwoven web.

9. The mechanical fastening system set forth in claim 28 wherein the nonwoven web comprises substantially continuous fibers.

28. A mechanical fastening system for an article, said fastening system comprising:

a first fastening component comprising an oriented nonwoven loop material secured to a substrate, the oriented nonwoven loop material comprising a nonwoven web of fibers in which a greater number of fibers are oriented in a selected direction by the application of a force in the selected direction to extend the web; and

a second fastening component comprising a hook material, the oriented nonwoven loop material of the first fastening component being adapted for releasable connection with the hook material of the second fastening component.

30. The mechanical fastening system set forth in claim 28 in combination with the article, said substrate being formed integrally with the article.

31. The mechanical fastening system set forth in claim 28 wherein the substrate is substantially inelastic.

33. An absorbent article for personal wear, the absorbent article comprising:

a liquid permeable inner layer for contact with a wearer's skin, an outer layer in superposed relationship with the inner layer, and an absorbent layer disposed between the inner layer and the outer layer, the article having a first end region and a second end region; and

a mechanical fastening system comprising at least one first fastening component disposed generally at the first end region of the article and at least one second fastening component disposed generally at the second end region of said article and adapted for releasable connection with the at least one first fastening component to secure the article on the wearer of said article, the at least one first fastening component comprising an oriented nonwoven loop material secured to a substrate, the oriented nonwoven loop material comprising a nonwoven web of

fibers in which a greater number of fibers are oriented in a selected direction by the application of a force in the selected direction to extend the web, the at least one second fastening component comprising a hook material, the oriented nonwoven loop material of the at least one first fastening component being adapted for releasable connection with the hook material of the at least one second fastening component.

34. The absorbent article set forth in claim 33 wherein the nonwoven web is generally free from substantial necking and gathering in a direction perpendicular to the direction in which the web is extended.

35. The absorbent article set forth in claim 33 wherein the substrate is formed integrally with the article.

36. The absorbent article set forth in claim 33 wherein the substrate is substantially inelastic.

37. The absorbent article set forth in claim 33 wherein the nonwoven web of the at least one first fastening component has a machine direction and a cross-machine direction, the

direction in which the web is extended being the machine direction.

40. A mechanical fastening system for an article, said fastening system comprising:

a first fastening component comprising a loop material formed by a nonwoven web of fibers, the fibers in the nonwoven web being oriented by drawing of the nonwoven web of fibers in a direction so that more of the fibers are oriented in the direction of drawing than prior to drawing of the nonwoven web of fibers; and

a second fastening component comprising a hook material, the oriented nonwoven loop material of the first fastening component being adapted for releasable connection with the hook material of the second fastening component.

41. The mechanical fastening system set forth in claim 40 in combination with the article, the first fastening component defining at least a portion of said article.

42. A mechanical fastening system for an article, said fastening system comprising:

a first fastening component comprising a loop material formed by a nonwoven web of fibers, the fibers in the nonwoven web being oriented by application of force to the nonwoven web of fibers in a direction so that more of the fibers are oriented in the direction of force than prior to applying a force to the nonwoven web of fibers; and

a second fastening component comprising a hook material, the oriented nonwoven loop material of the first fastening component being adapted for releasable connection with the hook material of the second fastening component.

43. The mechanical fastening system set forth in claim 42 in combination with the article, the first fastening component defining at least a portion of said article.

X. EVIDENCE APPENDIX

Submitted herewith is a declaration by one of the inventors of the present invention, Debra Durrance. The declaration was originally filed by the appellants on June 22, 2005 as an attachment to Amendment E.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application of Robert L. Popp, et al. Art Unit 3761
Serial No. 10/036,573
Filed December 31, 2001
Confirmation No. 4042
For MECHANICAL FASTENING SYSTEM FOR AN ABSORBENT ARTICLE
Examiner Karin M. Reichle

June 20, 2005

Declaration of Inventor Debra Durrance

I, Debra Durrance, declare as follows:

1. I am a co-inventor of the subject matter claimed in the above-entitled United States patent application, Serial Number 10/036,573.

2. The present invention is directed generally to a mechanical fastening system for an absorbent article. In one exemplary embodiment, the fastening system comprises a first fastening component comprising a forcibly oriented loop material formed by a nonwoven web of fibers. The fibers in the nonwoven web are oriented by application of force to the nonwoven web of fibers in a direction so that more of the fibers are oriented in a direction parallel to the direction of force than prior to applying a force to the nonwoven web of fibers. A second fastening component comprises hook material. The oriented nonwoven loop material of the first fastening component is adapted for releasable connection with the hook material of the second fastening component.

3. I have reviewed U.S. patent application, Serial Number 10/036,573 including the specification, drawings, and claims. I have also reviewed the Office action mailed February 22, 2005 in this application.

4. One of ordinary skill in the art would have understood at the time of the invention of the present application the term "oriented nonwoven loop material" to mean:

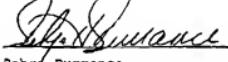
A web comprising fibers or filaments that is formed other than by weaving or knitting. The fibers in the web have a generally random orientation except that more of the fibers are generally parallel to a direction corresponding to a direction of force previously applied to the web. The orientation of the fibers would not be understood to be exclusively in the force direction or to be precisely parallel to the force direction.

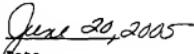
Figures 9a and 9b, which are attached hereto, are illustrative of an oriented nonwoven loop material before and after a force is applied to the web to orient the web fibers. Figure 9a shows the general orientation of the fibers of the web before a force is applied thereto. Figure 9b, on the other hand, shows the general orientation of the fibers of the web after the force has been applied. As illustrated, more of the web fibers are oriented in a direction generally parallel to the direction of the applied force than before the force was applied to the web.

5. I further declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further, that these statements were made with the knowledge that willful

KCC 4770 (K-C 17,310)
PATENT

false statements and the like so made are punishable by fine or imprisonment, or both, under 18 U.S.C. 1001, and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.


Debra Durrance


Date

XI. RELATED PROCEEDINGS APPENDIX

None.